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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,757	06/08/2001	Elizabeth Varriano-Marston	MARS93-DIV	3933

24222 7590 08/27/2004

MAINE & ASMUS
100 MAIN STREET
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EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/877,757

Applicant(s)

VARRIANO-MARSTON,
ELIZABETH6

Examiner

Marc A Patterson

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 8/6/07 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.Claim(s) objected to: none.Claim(s) rejected: 1-4,6-12,14,21 and 22.Claim(s) withdrawn from consideration: none.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: See attached.

ADVISORY ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S.C. 102(b) rejection of Claims 1 – 4, 9, 12 and 21 as being anticipated by Greengrass et al (U.S. Patent No. 4,886,372), of record on page 2 of the previous Action, is withdrawn.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 4, 6, 8 – 9, 12, 14 and 21 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547).

With regard to Claims 1, 8 and 21, Greengrass et al disclose an improved packaging (bag; column 1, line 21) for establishing optimum atmospheric conditions for respiring produce (a modified atmosphere packaging environment for fruit; column 1, lines 21 – 32) comprising a polymeric material (plastics material; column 2, lines 50 – 51) and a set of microperforations (column 2, lines 50 – 52) which are drill holes (made by pins; column 4, lines 30 – 34) on a target area on the polymeric material (a position which eliminates the possibility of product within the pack blocking the microperforation, therefore a finite region of the material; column 2,

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lines; 56 – 62), the microperforations controlling the optimum atmospheric conditions within specified oxygen and carbon dioxide concentrations of less than 20.9% oxygen and greater than 0.03 % carbon dioxide (therefore maintaining and controlling the atmospheric conditions within this range; column 1, lines 33 – 38). Greengrass et al fail to teach a microperforations having an average diameter between 110 and 400 microns and an oxygen flux ranging from 200 cc/day – atm to 1,500,000 cc/day – atm.

Kocher et al teach a microperforated packaging (column 3, lines 19 – 25) for produce (fruits of vegetables; column 9, lines 14 – 15) comprising perforations having an average diameter of 125 microns (column 17, lines 66 – 67) for the purpose of obtaining a packaging which provides an improved shelf life (column 1, lines 30 – 31). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the packaging comprising average diameter of Kocher et al in Greengrass et al, which is a microperforated packaging, depending on the desired shelf life of the end product as taught by Kocher et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the average diameter of Kocher et al in Greengrass et al in order to obtaining a packaging which provides an improved shelf life as taught by Kocher et al.

Kocher et al fail to disclose a packaging material providing an oxygen flux ranging from 200 cc/day – atm to 1,500,000 cc/day – atm, and a carbon dioxide transmission rate that is 3.4 to 4.0 times greater than the oxygen transmission rate. However, Kocher et al disclose a packaging material providing an oxygen flux (oxygen passes through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and a carbon dioxide transmission rate (carbon dioxide passes

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through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and teaches the selection of microperforation size depending on the desired passage of atmospheric gas, including oxygen and carbon dioxide (column 18, lines 1 – 3). Therefore one of ordinary skill in the art would have recognized the utility of varying the microperforation size to obtain a desired oxygen and carbon dioxide flux. Therefore, the oxygen and carbon dioxide flux would be readily determined through routine optimization of microperforation size by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the microperforation size in order to obtain a desired oxygen and carbon dioxide flux, since the oxygen and carbon dioxide flux would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kocher et al.

With regard to Claim 2, the packaging taught by Kocher comprises polyester (column 15, line 43).

With regard to Claim 3, the polymeric material taught by Kocher et al is heat – sealable (heat – weldable; column 4, lines 5 – 9).

With regard to Claim 4, the polymeric material taught by Kocher et al has a thickness in the range of 0.4 to 8 mil (column 17, lines 11 – 16).

With regard to Claim 9 the packaging taught by Kocher et al is comprised in a lid, as stated above, therefore in a semi – rigid container.

With regard to Claim 12, the film taught by Kocher et al is gas – permeable, as stated above, and is therefore not occluded.

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With regard to Claim 21, the microperforations taught by Kocher et al have an average diameter of 125 microns (column 17, lines 66 – 67).

With regard to Claims 6, 14 and 22, Kocher et al fail to disclose a packaging material providing a carbon dioxide transmission rate that is 3.4 to 4.0 times greater than the oxygen transmission rate. However, as stated above, Kocher et al teach a packaging material providing an oxygen flux (oxygen passes through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and a carbon dioxide transmission rate (carbon dioxide passes through the material, thus providing a carbon dioxide to oxygen transmission rate; column 17, lines 66 – 67; column 18, lines 1 – 5), and teaches the selection of microperforation size depending on the desired passage of atmospheric gas, including oxygen and carbon dioxide (column 18, lines 1 – 3). Therefore one of ordinary skill in the art would have recognized the utility of varying the microperforation size to obtain a desired oxygen and carbon dioxide flux. Therefore, the oxygen and carbon dioxide flux would be readily determined through routine optimization of microperforation size by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the microperforation size in order to obtain a desired oxygen and carbon dioxide flux and carbon dioxide to oxygen transmission rate, since the oxygen and carbon dioxide flux would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kocher et al.

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4. Claims 7 and 10 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and further in view of Porchia et al (U.S. Patent No. 5,492,705).

Greengrass et al and Kocher et al disclose a microperforated packaging as discussed above. With regard to Claims 7 and 10 – 11, Greengrass et al and Kocher et al fail to disclose a microperforated packaging which is a bag which is substantially enclosed with a top seal, a bottom seal and a pair of side seals having the target area within one – quarter distance from the top seal.

Porchia et al teach the use of microperforated packaging in a bag (therefore providing top sealing, bottom sealing and side sealing; column 2, lines 50 – 60) for the purpose of controlling the weight loss of fruit stored in the bag (column 2, lines 50 – 60); the microperforations are within one quarter of the top seal (Figure 1). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the bag of Porchia et al in Greengrass et al and Kocher et al which comprises microperforated packaging, depending on the desired control of weight loss of fruit stored in the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a bag having microperforations within one quarter of the top seal in Greengrass et al and Kocher et al in order to control the weight loss of fruit as taught by Porchia et al.

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1 – 4, 8 – 9, 12 – 13 and 21 as being anticipated by Greengrass et al (U.S. Patent No. 4,886,372), 35 U.S.C. 103(a) rejection of Claims 2 – 4, 9, 12 – 13 and 21 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and 35 U.S.C. 103(a) rejection of Claims 7 and 10 – 11 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and further in view of Porchia et al (U.S. Patent No. 5,492,705), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 14, that the perforations of Greengrass et al are not in a registered target area as the term applies to the present invention, because in the claimed invention the perforations are in a small region as opposed to being distributed throughout the packaging.

However, as stated above, the perforations disclosed by Greengrass et al are drill holes (made by pins; column 4, lines 30 – 34), and are therefore registered by the process of drilling; furthermore, as the perforations do not occupy the entirety of the polymeric material, the perforations occupy a finite area of the material.

Applicant also argues, on page 16, that there is no support or discussion in Greengrass et al of registering the perforations in a finite region of the target area, although Greengrass et al teach the intention to avoid blockage of the holes.

However, to avoid blockage, Greengrass et al disclose the placement of the perforations in an area selected for its avoidance of blockage (the perforations are placed in positions that

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eliminate the possibility of product within the package blocking the microperforations; column 2, lines 56 – 62), therefore a finite area.

Applicant also argues, on page 17, that the examples of Greengrass et al are directed to perforations in the range of 20,000 to 60,000 microns, which are not sufficient for the control of atmospheric conditions; Greengrass et al disclose a perforation size of 250 microns, Applicant argues further, but teaches away from using of plurality of these smaller holes.

However, it is unclear where Greengrass et al teach away from a plurality of perforations having a size of 250 microns; the reference of that size in Greengrass et al states that one such perforation is all that is necessary to control the atmosphere in a package containing 500 grams of produce, but does not exclude the use of a plurality of 250 micron perforations; Greengrass et al appears to disclose the use of microperforations without limiting the usable size (the number and size of the openings are dependent on various parameters; column 1, lines 63 – 65).

Furthermore, as stated above, Kocher et al teach a microperforated packaging (column 3, lines 19 – 25) for produce (fruits of vegetables; column 9, lines 14 – 15) comprising perforations having an average diameter of 125 microns (column 17, lines 66 – 67) for the purpose of obtaining a packaging which provides an improved shelf life (column 1, lines 30 – 31).

Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the packaging comprising average diameter of Kocher et al in Greengrass et al, which is a microperforated packaging, depending on the desired shelf life of the end product as taught by Kocher et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the average diameter of Kocher et al in

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Greengrass et al in order to obtaining a packaging which provides an improved shelf life as taught by Kocher et al.

Applicant also argues, on page 18, that Greengrass et al set forth a the proposition that carbon dioxide levels should be greater than 5% and oxygen levels less than 8%, with little or no support or explanation to accomplish the goal.

However, it is clear that the disclosure of the oxygen level and carbon dioxide level by Greengrass et al is intended to mean that the goal is accomplished by the packaging itself, when it contains produce.

Applicant also argues, on page 19, that there is no teaching in Greengrass et al of the relationship of the atmosphere to the number of holes, and merely speculates that experimentation might conjure up a better atmosphere.

However, the relationship of the atmosphere to the number of holes is not claimed; furthermore, as stated above, the atmospheric conditions of the claimed invention are disclosed by Greengrass et al, although an explanation of how the holes provide the atmosphere is not provided.

Applicant also argues, on page 22, that Kocher et al is distinguishable from the claimed invention because Kocher et al teaches a multilayer film. However, as stated above, that is taught is a microperforated packaging film, as is the claimed invention, thus Greengrass et al and Kocher et al are analogous. Furthermore, as stated above, Kocher et al teach a microperforated packaging (column 3, lines 19 – 25) for produce (fruits of vegetables; column 9, lines 14 – 15) comprising perforations having an average diameter of 125 microns (column 17, lines 66 – 67) for the purpose of obtaining a packaging which provides an improved shelf life (column 1, lines

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30 – 31). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the packaging comprising average diameter of Kocher et al in Greengrass et al, which is a microperforated packaging, depending on the desired shelf life of the end product as taught by Kocher et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the average diameter of Kocher et al in Greengrass et al in order to obtaining a packaging which provides an improved shelf life as taught by Kocher et al.

Applicant also argues, on page 23, that Kocher et al does not support the contention that Kocher perforations are intended for longer shelf life, and that it is believed that central processing, rather than the processing taught by Kocher et al, would lead to a more sanitary product.

However, as stated above, Kocher et al teach a microperforated packaging (column 3, lines 19 – 25) for produce (fruits of vegetables; column 9, lines 14 – 15) comprising perforations having an average diameter of 125 microns (column 17, lines 66 – 67) for the purpose of obtaining a packaging which provides an improved shelf life (column 1, lines 30 – 31). Furthermore, it is unclear why it is believed that central processing, rather than the processing taught by Kocher et al, would lead to a more sanitary product.

Applicant also argues, on page 24, that no support has been provided for a container with a thickness greater than 25 mil.

However, the Kocher et al teach a film having any desired thickness (column 17, lines thickness of 0.3 to 12 mils, and teach a packaging material providing an oxygen flux (oxygen

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passes through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and a carbon dioxide transmission rate (carbon dioxide passes through the material, thus providing a carbon dioxide to oxygen transmission rate; column 17, lines 66 – 67; column 18, lines 1 – 5), and teaches the selection of thickness depending on the desired passage of atmospheric gas, including oxygen and carbon dioxide (column 18, lines 1 – 3). Therefore one of ordinary skill in the art would have recognized the utility of varying the thickness to obtain a desired oxygen and carbon dioxide flux. Therefore, the oxygen and carbon dioxide flux would be readily determined through routine optimization of thickness by one having ordinary skill in the art depending on the desired end use of the product.

Applicant also argues, on page 25, that there is nothing to indicate why Kocher et al would control an atmosphere, and that the passages referred to do not describe flux or transmission rate. However, controlling of an atmosphere is disclosed in Greengrass et al; furthermore, as stated above, it would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the average diameter of Kocher et al in Greengrass et al in order to obtaining a packaging which provides an improved shelf life as taught by Kocher et al.

Applicant argues, on page 26, that support should be provided for the official notice that oxygen and carbon dioxide flux rate would readily be determined by altering microperforation size. As stated above, Kocher et al disclose a packaging material providing an oxygen flux (oxygen passes through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and a carbon dioxide transmission rate (carbon dioxide passes through the material; column 17, lines 66 – 67; column 18, lines 1 – 5), and teaches the selection of microperforation size depending on

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the desired passage of atmospheric gas, including oxygen and carbon dioxide (column 18, lines 1 – 3). Therefore one of ordinary skill in the art would have recognized the utility of varying the microperforation size to obtain a desired oxygen and carbon dioxide flux. Therefore, the oxygen and carbon dioxide flux would be readily determined through routine optimization of microperforation size by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the microperforation size in order to obtain a desired oxygen and carbon dioxide flux, since the oxygen and carbon dioxide flux would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kocher et al. Support is therefore provided by Kocher et al.

Applicant also argues, on page 29, that Porchia teaches perforations over an entire bag, not in a target area as in the claimed invention. However, as stated above, Porchia et al is cited for the teaching of the use of microperforated packaging in a bag (therefore providing top sealing, bottom sealing and side sealing; column 2, lines 50 – 60) for the purpose of controlling the weight loss of fruit stored in the bag (column 2, lines 50 – 60); the microperforations are within one quarter of the top seal (Figure 1). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the bag of Porchia et al in Greengrass et al and Kocher et al which comprises microperforated packaging, depending on the desired control of weight loss of fruit stored in the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a bag having microperforations within one

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quarter of the top seal in Greengrass et al and Kocher et al in order to control the weight loss of fruit as taught by Porchia et al.

The declaration under 37 C.F.R. 1.132 filed August 6, 2004 is insufficient to overcome the 35 U.S.C. 102(b) rejection of Claims 1 – 4, 8 – 9, 12 – 13 and 21 as being anticipated by Greengrass et al (U.S. Patent No. 4,886,372), 35 U.S.C. 103(a) rejection of Claims 2 – 4, 9, 12 – 13 and 21 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and 35 U.S.C. 103(a) rejection of Claims 7 and 10 – 11 as being unpatentable over Greengrass et al (U.S. Patent No. 4,886,372) in view of Kocher et al (U.S. Patent No. 5,919,547) and further in view of Porchia et al (U.S. Patent No. 5,492,705) because the evidence set forth therein fails to compare the claimed invention to the closest prior art.

The declaration provides data on the atmosphere contained in a package containing perforations of the size of the examples of Greengrass et al, and states that it is not possible to obtain the oxygen and carbon flux of the claimed invention with the packaging of Greengrass et al.

However, as stated above, Greengrass et al is not limited to the perforation sizes of the examples, as microperforations are taught by Greengrass et al. The closest prior art, as stated above, is the film disclosed by Greengrass et al provided with the perforation size of Kocher et al.


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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (571) 272 – 1497. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571) 272 – 1498. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
Art Unit 1772


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

8/19/04